

## REMARKS

Claims 1-7 are pending in the present application. None of the claims have been amended in this response. Favorable reconsideration is respectfully requested. .

Claims 1-4, 6 and 7 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Sato* (U.S. Patent No. 6,091,535). Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Sato* (U.S. Patent No. 6,091,535). The applicants respectfully traverse these rejections for the following reasons.

Specifically, *Sato* does not teach or suggest “feeding said amplitude-modulated optical signal to a frequency discriminator which outputs a spectral distribution signal; feeding said spectral distribution signal to a control device which is also fed an adjustable reference signal; and generating a control signal which sets an operating point of said modulator by comparing said adjustable reference signal and said spectral distribution signal” as recited in claim 1. The Office Action has equated photodetector 4 with a frequency discriminator, however, Applicants submit that this is incorrect.

*Sato* discloses an optical transmitter having a driver circuit generating a driving signal from an electrical input signal. A first photodetector (4) monitors the average power of the modulated optical signal. The second photodetector (5) monitors the power of the unmodulated optical signal. The feedback circuit controls the bias voltage according to the average power of the modulated optical signal and the power of the unmodulated signal (col. 2, lines 13-19; col. 3, lines 8-23). The first photodetector 4 (e.g. a photodiode) converts the optical signal received from the optical coupler 3 to an electrical signal  $S_4$  for input to the divider 7. The response speed of the first photodetector 4 is slower than the modulation rate of the optical signal, so the electrical signal  $S_4$  represents the average power of the optical signal, rather than the power of individual pulses in the signal (col. 3, lines 54-60).


In other words, the photodetector 4 of *Sato* converts optical signals into electrical signals, regardless of the frequency (i.e., cannot “discriminate”). In contrast, the frequency discriminator recited in the present claims (see also claim 6) has an output signal that depends on the frequency, so, for example, if the frequency of the modulator signal OSM changes according to the chirp of the OSM signal, the output of the

frequency discriminator will also change and the control device corrects the operating point of the modulator. The frequency discriminator, along with the related features recited in claims 1 and 6 are not taught nor suggested in *Satoh*. Accordingly, Applicants submit the rejections under 35 U.S.C. §102 and §103 are improper and should be withdrawn.

In light of the foregoing comments, the applicants respectfully submit that the application is in condition for allowance and request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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